

SHORT COMMUNICATION

METAZYGIA LEVII, A NEW SPECIES OF ORB-WEAVING SPIDER FROM BRAZIL (ARANEAE, ARANEIDAE)

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ABSTRACT. A new species of orb-weaving spider, *Metazygia levii*, is described and illustrated based on specimens from State of Espírito Santo, Brazil.

Keywords: *Metazygia*, Araneidae, neotropical region, taxonomy

The family Araneidae, when compared with other large spider families, is certainly the best known in the neotropics. This privileged situation can be attributed to Herbert W. Levi's excellent revisions (see complete series citations in Levi 1993, 1996, 1999, 2001). These revisions not only allow species identification, but also enables us to recognize new species, which is impossible in unrevised groups. Even in such a well known group, new species are eventually discovered. In this paper, a new species of *Metazygia* F.O.P.-Cambridge 1904, collected during a spider diversity inventory, is described and illustrated. The material examined was deposited in the spider collection of Instituto Butantan (curator, A. D. Brescovit). All measurements are in mm.

Metazygia levii new species Figs. 1–5

Types.—Male holotype from Reserva Florestal da Companhia Vale do Rio Doce, São Mateus, Espírito Santo, Brazil (19°06'S, 39°45'W), 19–25 July 1997, A. D. Brescovit et al. (IBSP 29315); male and female paratypes, same collection data (IBSP 12768).

Etymology.—The specific name is a patronym in honor of H.W. Levi, in recognition of his contributions to neotropical spider systematics.

Diagnosis.—Males of *Metazygia levii* resemble those of *M. gregalis* (O.P.-Cambridge 1889), *M. benella* Levi 1995 and *M. yobena* Levi 1995 in the medium-sized embolus and the conductor with ventral prongs (Levi 1995, figs. 258, 267 & 274), but differs by the presence of an ectal pointed projection in the tegulum and the sub-pentagonal median apophysis (Fig. 2–M). Females can be distinguished from all other species of the genus by the epigynum with large and sclerotized lateral plates (Figs. 3, 4–L) and with a ventrally projected median field (Fig. 5–MF) with a small scapus (Fig. 5–S).

Description.—Male (paratype): Carapace orange, cephalic region brown, chelicerae brown. Labium and endites light brown. Sternum orange with pale brown spots. Coxae and femora light orange; trochanters, patellae, tibiae, metatarsi and tarsi reddish-brown. Dorsum of abdomen gray with dark sinuous lateral stripes, laterally dark, venter uniformly dark. Total length 4.7, carapace length 2.3, width 1.7. Tibia I length 1.7, II 1.6, III 0.85, IV 1.0. Abdomen length 2.3, width 1.8. Cymbium semi-transparent in mesal view, radix small, conductor sclerotized, pointed ventrally and with a mesal soft branch supporting the embolus. Conductor soft branch with two ventral prongs. Median apophysis sub-retangular, with a central white area and a pointed and sclerotized apex (Fig. 2–MA). Tegulum with a sclerotized and ventrally pointed flange (Fig. 2–EP).

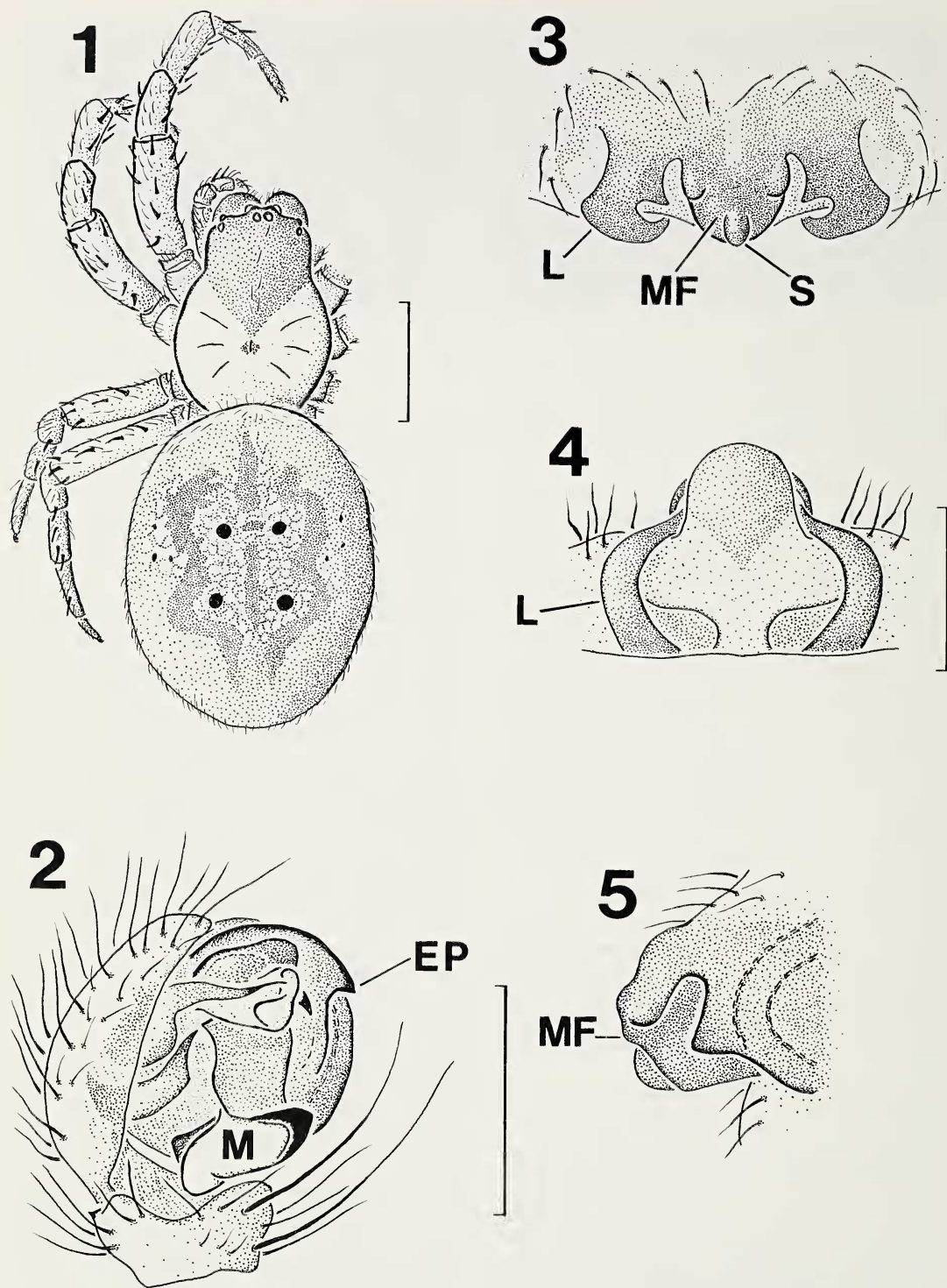
Female (paratype): Color as in male, but darker (Fig. 1). Total length 6.57, carapace length 2.57, width 2.14. Tibia I length 1.70, II 1.42, III 0.71, IV 1.14. Abdomen length 4.71, width 3.42. Epigynum with large lateral sclerotized plates, and ventrally projected median field (Fig. 3). Median plate cross-shaped, rounded apically (Fig. 4). Median field with a small ventral rounded projection (Fig. 5).

Variation.—Females, total length 6.0–8.57 ($n = 6$).

Natural History.—Two females were collected in a vegetation type composed mainly by scattered patches of small bushes over a sandy soil, locally known as “Campo Nativo” (Jesus 1988).

Distribution.—Known only from the type locality.

Additional material.—Three immature specimens collected with the types (IBSP 12768); 5 ♀, same locality as types, 19–25 July 1997 (IBSP 12951); 2 ♀, same locality as types, 5–12 January 1998 (IBSP 29316 & IBSP 16570).



Figures 1-5.—*Metazygia levii* new species. 1. Female body, dorsal view; 2. male palpus, mesal view; 3. female epigynum, ventral view; 4. posterior view; 5. lateral view. Scale lines: 1 = 2 mm; 2 = 0.5 mm; 3-5 = 0.25 mm. Abbreviations: EP, ectal pointed projection of tegulum; L, lateral plate; M, median apophysis; MF, median field; S, scapus.

ACKNOWLEDGMENTS

The author is indebted to Antonio D. Brescovit for providing specimens of *Metazygia gregalis* for comparison, to Cristina A. Rheims and A.D. Brescovit for suggestions on the first draft of the manuscript, and the staff of Reserva Florestal da Companhia Vale do Rio Doce for support in field work. This paper received financial support from Fundação de Amparo à Pesquisa do Estado de São Paulo PhD fellowship (FAPESP 99/05695-8).

LITERATURE CITED

- Cambridge, F.O.P.-. 1904. In *Biologia Centrali-Americana*. Arachnida. Araneida and Opiliones. 2:465–560.
- Jesus, R.M. 1988. A reserva florestal da CVRD. Pp. 59–112. In *Anais do VI Congresso Florestal Estadual*, vol. 1.
- Levi, H.W. 1993. The neotropical orb-weaving spiders of the genera *Wixia*, *Pozonia*, and *Ocrepeira* (Araneae: Araneidae). *Bulletin of the Museum of Comparative Zoology, Harvard University* 153(2):47–141.
- Levi, H.W. 1995. The Neotropical orb-weaver genus *Metazygia* (Araneae: Araneidae). *Bulletin of the Museum of Comparative Zoology, Harvard University* 154(2):63–151.
- Levi, H.W. 1996. The american orb-weavers *Hypognatha*, *Encyosaccus*, *Xylethrus*, *Gasteracantha*, and *Enacrosoma* (Araneae, Araneidae). *Bulletin of the Museum of Comparative Zoology, Harvard University* 155(3):89–157.
- Levi, H.W. 1999. The neotropical and mexican orb weavers of the genera *Cyclosa* and *Allocyclosa* (Araneae: Araneidae). *Bulletin of the Museum of Comparative Zoology, Harvard University* 155(7):299–379.
- Levi, H.W. 2001. The orb-weavers of the genera *Molinaranea* and *Nicolepeira*, a new species of *Parawixia*, and comments on orb-weavers of temperate South America (Araneae: Araneidae). *Bulletin of the Museum of Comparative Zoology, Harvard University* 155(9):445–475.

Manuscript received 16 October 2001, revised 1 August 2002.